## **REMARKS**

Favorable reconsideration is respectfully requested in view of the above amendments and following remarks. Claims 15 and 17 have been amended. The amendment to claims 15 and 17 is supported by the original disclosure, for example at page 15, lines 7-9 and page 27, lines 13-28 of the specification. Claims 1, 16 and 18-29 have been canceled without prejudice or disclaimer. Claim 30 and 31 are new, and are supported for example by page 12, line 30 to page 13, line 23. No new matter has been added. Claims 15, 17 and 30-31 are pending.

Claims 1, 5 and 17 are rejected under 35 USC 112, second paragraph, as being indefinite. Claim 1 has been canceled. Claim 30 generally tracks the language of claim 1. Claim 30 is directed to a method of diagnosing endometriosis or a disease caused by endometriosis in a subject. Claim 30 recites comparing the amount of HRF protein in the sample from the subject with an amount of HRF protein in a control. Claim 31 further defines the control as being a sample from a subject that (1) does not have endometriosis or a disease caused by endometriosis or (2) is not at risk for endometriosis or a disease caused by endometriosis. Claim 30 also recites that an increase in the amount of HRF protein in the sample from the subject as compared to the amount of HRF protein in the control (1) indicates endometriosis or a disease caused by endometriosis in the subject or (2) correlates with risk for endometriosis or a disease caused by endometriosis in the subject.

As to claim 15, claim 15 further limits the measuring step of claim 30 and recites that this step includes (a) contacting a sample from a subject with a support on which a first antibody has been immobilized, the first antibody being capable of binding to a first epitope of HRF protein, (b) washing the support with a reagent so as to remove unbounded components, (c) contacting a second antibody with the support washed in step (b), the second antibody being capable of binding to a second epitope of HRF protein and including a labeling substance and (d) measuring a signal of the labeling substance. Claim 15 also limits the comparing step of claim 30, and recites that this step includes comparing the signal measured in step (d) with that of the control, the signal measured in step (d) reflecting the amount of HRF protein in the sample from the subject in step (a).

As to claim 17, claim 17 recites that at least one of the first and second antibodies are obtained by using a peptide that is an immunizing antigen. As indicated above, claim 15 recites that the first antibody is capable of binding to a first epitope of HRF protein and the second antibody is capable of binding to a second epitope of HRF protein.

In view of the above, Applicants submit that claim 30 and its dependent claims are definite.

Claim 1 is rejected under 35 USC 102(b) as being anticipated by Oikawa et al. (Journal of Pathology 199: 318-232). The US filing date for the present application is the January 13, 2004 filing date of the PCT application. The Oikawa reference has a publication date of January 13, 2003, which is within one year of the priority date of the present application. Accordingly, the Oikawa reference is not available as prior art under 102(b).

In addition, Applicants hereby submit Declarations under 37 CFR 1.132 by the inventors of the present application. The Declarations state that although Ms. Akemi Kameta, Mr. Keiichi Isaka, Mr. Masomi Takayama and Mr. Kiyoshi Mukai are coauthors of the Oikawa reference, they are not the co-inventors of the invention disclosed and claimed in the present application. The Declarations further state that Ms. Akemi Kameta, Mr. Keiichi Isaka, Mr. Masomi Takayama and Mr. Kiyoshi Mukai did not have any role in the conception of the invention and did not invent the subject matter of the present application. Executed Declarations of Mr. Masahiko Kuroda, Mr. Yoshinori Kosugi, Mr. Testuya Ohbayashi and Mr. Kosuke Oikawa are submitted herewith. With the submission of these Declarations, Applicants respectfully submit that the Oikawa reference cannot be considered work by "another", and is not available as prior art under 102(a).

Claims 15 and 17 are rejected under 35 USC 103(a) as being unpatentable over Oikawa in view of Hochstrasser et al. (WO 94/12881). The rejection is rendered moot, as Oikawa is not available as prior art.

Application No. 10/564484 Responsive to the office action dated May 19, 2009

Favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

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Dated: August 19, 2009

DPM/ym

Respectfully submitted,

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